

**IN THE CLAIMS**

Please amend the claims as follows:

1. (Currently Amended) A method executed internal to a computing device for identifying an available peripheral component interconnect (PCI) slot in the computing device, comprising:

identifying a plurality of PCI slots in the computing device;

identifying at least one PCI device coupled to a PCI bus, the PCI bus coupled to the PCI slot; and

~~identifying, without requiring physical inspection of the PCI slots, an unoccupied PCI slot, an~~ to a user of the computing device one or more unoccupied PCI slots without requiring physical inspection of the PCI slots, the one or more unoccupied PCI slots identified by comparing the plurality of PCI slots in the computing device with the at least one PCI device coupled the PCI bus, the one or more unoccupied PCI slots ~~slot~~ comprising an identified PCI slot that is not coupled to an identified PCI device.

2. (Previously Presented) The method of Claim 1, wherein identifying a plurality of PCI slots in the computing device comprises identifying a bus number and a device number for the plurality of PCI slots using a PCI Interrupt Request (IRQ) routing table.

3. (Original) The method of Claim 2, further comprising locating the routing table in a read-only memory in the computing device.

4. (Previously Presented) The method of Claim 1, wherein identifying the at least one PCI device coupled to a PCI bus comprises identifying a bus number and a device number for each PCI device coupled to the PCI bus.

5. (Currently Amended) The method of Claim 1, wherein identifying to a user of the computing device one or more unoccupied PCI slots ~~an unoccupied PCI slot~~ comprises comparing a bus number and a device number of at least one of the identified PCI slots to a bus number and a device number of the at least one of the identified PCI devices.

6. (Previously Presented) The method of Claim 1, further comprising determining how many identified PCI slots are unoccupied.

7. (Currently Amended) A system for identifying an available peripheral component interconnect (PCI) slot in a computing device by executing an application internal to the computing device, comprising:

at least one computer readable medium; and

software encoded on the at least one computer readable medium and operable when executed by a processor to:

identify a plurality of PCI slots in the computing device;

identify at least one PCI device coupled to a PCI bus, the PCI bus coupled to the PCI slot; and

~~identify, without requiring physical inspection of the PCI slots, an unoccupied PCI slot, and~~ to a user of the computing device one or more unoccupied PCI slots without requiring physical inspection of the PCI slots, the one or more unoccupied PCI slots identified by comparing the plurality of PCI slots in the computing device with the at least one PCI device coupled the PCI bus, the one or more unoccupied PCI slots comprising an identified PCI slot that is not coupled to an identified PCI device.

8. (Previously Presented) The system of Claim 7, wherein the software is operable to identify a plurality of PCI slots in the computing device by identifying a bus number and a device number for the plurality of PCI slots using a PCI Interrupt Request (IRQ) routing table.

9. (Original) The system of Claim 8, wherein the software is further operable to locate the routing table in a read-only memory in the computing device.

10. (Previously Presented) The system of Claim 7, wherein the software is operable to identify the at least one PCI device coupled to a PCI bus by identifying a bus number and a device number for each PCI device coupled to the PCI bus.

11. (Currently Amended) The system of Claim 7, wherein the software is operable to identify to a user of the computing device one or more unoccupied PCI slots ~~an unoccupied PCI slot~~ by comparing a bus number and a device number of at least one of the identified PCI slots to a bus number and a device number of the at least one of the identified PCI devices.

12. (Previously Presented) The system of Claim 7, wherein the software is further operable to determine how many identified PCI slots are unoccupied.

13. (Currently Amended) A system for identifying an available peripheral component interconnect (PCI) slot in a computing device by executing a process internal to the computing device, the system comprising:

a memory operable to store information identifying a plurality of PCI slots in the computing device; and

a processor coupled to the memory and operable to:

identify at least one PCI device coupled to a PCI bus, the PCI bus coupled to the PCI slot; and

~~identify, without requiring physical inspection of the PCI slots, an unoccupied PCI slot, an~~ to a user of the computing device one or more unoccupied PCI slots without requiring physical inspection of the PCI slots, the one or more unoccupied PCI slots identified by comparing the plurality of PCI slots in the computing device with the at least one PCI device coupled the PCI bus, the one or more unoccupied PCI slots ~~slot~~ comprising an identified PCI slot that is not coupled to an identified PCI device.

14. (Previously Presented) The system of Claim 13, wherein the processor is operable to generate the information identifying a plurality of PCI slots in the computing device by identifying a bus number and a device number for the plurality of PCI slots using a PCI Interrupt Request (IRQ) routing table.

15. (Original) The system of Claim 14, wherein the processor is further operable to locate the routing table in a read-only memory in the computing device.

16. (Previously Presented) The system of Claim 13, wherein the processor is operable to identify the at least one PCI device coupled to a PCI bus by identifying a bus number and a device number for each PCI device coupled to the PCI bus using a bus controller.

17. (Currently Amended) The system of Claim 13, wherein the processor is operable to identify to a user of the computing device one or more unoccupied PCI slots ~~an unoccupied PCI slot~~ by comparing a bus number and a device number of at least one of the identified PCI slots to a bus number and a device number of the at least one of the identified PCI devices.

18. (Previously Presented) The system of Claim 13, wherein the processor is further operable to determine how many identified PCI slots are unoccupied.

19. (Currently Amended) A method executed internal to a computing device for identifying an available peripheral component interconnect (PCI) slot in the computing device, comprising:

locating a PCI Interrupt Request (IRQ) routing table;

identifying a bus number and a device number for each of a plurality of PCI slots in the computing device using the routing table;

identifying a bus number and a device number for at least one PCI device coupled to a PCI bus of the computing device, the PCI bus coupled to the PCI slot;

comparing the bus number and the device number for each of the identified PCI slots to the bus number and the device number of at least one of the identified PCI devices coupled to the PCI bus; and

based on the comparison of the bus number and the device number for at least one of the identified PCI slots and the bus number and the device number of the at least one of the identified PCI devices coupled to the PCI bus, determining if any of the identified PCI slots in the computing device are unoccupied, an unoccupied PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

20. (Currently Amended) A system for identifying an available peripheral component interconnect (PCI) slot in a computing device by executing an application internal to the computing device, the system comprising:

at least one computer readable medium; and

software encoded on the at least one computer readable medium and operable when executed by a processor to:

locate a PCI Interrupt Request (IRQ) routing table;

identify a bus number and a device number for each of a plurality of PCI slots in the computing device using the routing table;

identify a bus number and a device number for at least one PCI device coupled to a PCI bus of the computing device, the PCI bus coupled to the PCI slot;

compare the bus number and the device number for each of the plurality of PCI slots to the bus number and the device number of the at least one PCI device coupled to the PCI bus; and

based on the comparison of the bus number and the device number for at least one of the plurality of PCI slots and the bus number and the device number of the at least one PCI device coupled to the PCI bus, determine if any of the identified PCI slots in the computing device are unoccupied, an unoccupied PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

21. (Currently Amended) A system for identifying an available peripheral component interconnect (PCI) slot in a computing device by executing a process internal to the computing device, the system comprising:

a memory containing a PCI Interrupt Request (IRQ) routing table; and

a processor coupled to the memory and operable to:

locate the routing table in the memory;

identify a bus number and a device number each of a plurality of PCI slots in the computing device using the routing table;

identify a bus number and a device number for at least one PCI device coupled to a PCI bus of the computing device, the PCI bus coupled to the PCI slot;

compare the bus number and the device number for each of the plurality of identified PCI slots to the bus number and the device number of the at least one PCI device coupled to the PCI bus; and

based on the comparison of the bus number and the device number for at least one of the plurality of identified PCI slots and the bus number and the device number of the at least one PCI device coupled to the PCI bus, determine if any of the identified PCI slots in the computing device are unoccupied, an unoccupied PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

22. (Previously Presented) The method of Claim 1, wherein identifying a plurality of PCI slots in the computing device comprises generating a list of identified PCI slots associated with the computing device.

23. (Previously Presented) The method of Claim 1, wherein identifying at least one PCI device coupled to a PCI bus comprises generating a list of one or more PCI devices coupled to the PCI bus.

24. (Previously Presented) The system of Claim 7, wherein the software is operable to generate a list of identified PCI slots associated with the computing device to identify a plurality of PCI slots in the computing device.

25. (Previously Presented) The system of Claim 7, wherein the software is operable to generate a list of one or more PCI devices coupled to the PCI bus to identify at least one PCI device coupled to a PCI bus.

26. (Currently Amended) A method executed internal to a computing device for identifying an available peripheral component interconnect (PCI) slot in the computing device, comprising:

generating a list of PCI slots associated with the computing device;

generating a list of one or more PCI devices coupled to a PCI bus of the computing device, the PCI bus coupled to the PCI slot; and

identifying an unoccupied PCI slot without ~~,without~~ requiring physical inspection of any PCI slots in the computing device, ~~an unoccupied PCI slot~~ the unoccupied PCI slot identified by comparing the list of PCI slots associated with the computing device with the list of one or more PCI devices coupled to the PCI bus, an unoccupied PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

27. (Currently Amended) A method executed internal to a computing device for identifying an available peripheral component interconnect (PCI) slot in the computing device, comprising:

generating an identification table identifying a plurality of PCI slots associated with the computing device;

generating an enumeration table enumerating one or more PCI devices coupled to a PCI bus of the computing device, the PCI bus coupled to the PCI slot; and

identifying an unoccupied PCI slot without ~~,without~~ requiring physical inspection of any PCI slots in the computing device, ~~an unoccupied PCI slot~~ the unoccupied PCI slot identified by comparing the identification table and the enumeration table, an unoccupied PCI slot comprising an identified PCI slot that is not coupled to any enumerated PCI device.